

WHAT IS CLAIMED IS:

1. High-purity standard particles production apparatus comprising a particles generation chamber to generate high-purity particles by laser ablation in an ambient gas, a particles classification chamber to classify high-purity standard particles of a diameter as required from said high-purity particles as generated at said generation chamber and a particles collecting chamber to collect said high-purity standard particles as classified at said classification chamber.

2. High-purity standard particles production apparatus according to claim 1 wherein a plurality of particles classification means are disposed in said particles classification chamber.

3. High-purity standard particles production apparatus according to claim 1 wherein said high-purity standard particles are subjected to heating treatment by infrared radiation at a downstream of said particles classification chamber.

4. High-purity standard particles production apparatus according to claim 1 wherein a gas refining means is provided to substantially remove impurities contained in a raw material gas supplied as said ambient gas.

5. High-purity standard particles production apparatus according to claim 1 wherein an orifice is provided in said particles collecting chamber to reduce a piping cross section

through a passage course of said high-purity standard particles.

6. High-purity standard particles produced by a high-purity standard particles production apparatus comprising a particles generation chamber to generate high-purity particles by laser ablation in an ambient gas, a particles classification chamber to classify high-purity standard particles of a diameter as required from said high-purity particles as generated at said generation chamber and a particles collecting chamber to collect said high-purity standard particles as classified.